

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39

[Docket No. FAA-2020-0652; Product Identifier 2019-SW-066-AD]

RIN 2120-AA64

**Airworthiness Directives; Airbus Helicopters** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters. This proposed AD would require inspecting the main rotor (M/R) hub assembly (hub) phonic wheel lock washer (lock washer) for correct installation and depending on the outcome, repairing or replacing the M/R hub. This proposed AD was prompted by reported occurrences of M/R revolutions per minute ("NR") sensor fluctuations. The actions of this proposed AD are intended to address an unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to https://www.regulations.gov. Follow the online instructions for sending your comments electronically.
  - Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket
  Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
  Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
  Monday through Friday, except Federal holidays.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0652; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at

https://www.airbus.com/helicopters/services/technical-support.html. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov.

#### SUPPLEMENTARY INFORMATION:

#### **Comments Invited**

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

#### **Confidential Business Information**

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted

comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

#### Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2019-0172, dated July 18, 2019, to correct an unsafe condition for Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale) Model AS 332 C, AS 332 C1, AS 332 L, and AS 332 L1 helicopters with M/R hub part number 332A31-0001-00, P/N 332A31-0001-01, P/N 332A31-0001-02, P/N 332A31-0001-03, P/N 332A31-0001-04, P/N 332A31-0001-05, or P/N 332A31-0001-06 installed. EASA advises of reported occurrences of "NR" sensor fluctuation and subsequent investigation identifying incorrect positioning of the M/R hub phonic wheel due to incorrect installation of the M/R mast nut press screws during maintenance of the M/R hubs. The investigation also determined that this incorrect installation can be identified by inspecting the lock washer position. EASA advises that this condition, if not detected and corrected, could lead to failure of M/R hub components, possibly resulting in loss of helicopter control.

Accordingly, the EASA AD requires a one-time inspection of the lock washer position and depending on findings, replacing the M/R hub.

#### FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type designs.

## Related Service Information Under 1 CFR part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin No. AS332-62.00.76, Revision 0, dated May 27, 2019, for civilian Model AS332C, C1, L, and L1 and military Model AS332B, B1, F1, M, and M1 helicopters. This service information specifies inspecting the position of the M/R hub lock washer.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Proposed AD Requirements**

This proposed AD would require, within 55 hours time-in-service, removing at least one "NR" sensor and borescope inspecting for the correct height of the lock washer through the hole of the removed "NR" sensor. This proposed AD would then require installing an "NR" sensor(s), and if the lock washer height is not correct, also repairing or replacing the M/R hub with an airworthy M/R hub.

This proposed AD would also prohibit the installation of an affected M/R hub unless it has successfully passed the required inspection for correct lock washer installation.

# Differences between this Proposed AD and the EASA AD

The EASA AD requires using a flashlight and visually inspecting the position of the lock washer, and further specifies that using an endoscope can facilitate that inspection. This proposed AD would require borescope inspecting for the correct height of the lock washer instead. After inspecting, the EASA AD requires reinstalling the removed "NR" sensor(s), while this proposed AD would require installing airworthy "NR" sensor(s) instead. If the lock washer is in an incorrect position, the EASA AD requires replacing the M/R hub, whereas this proposed AD would require repairing or replacing the M/R hub with an airworthy M/R hub instead.

## **Costs of Compliance**

The FAA estimates that this proposed AD affects 11 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this proposed AD.

Removing an "NR" sensor and borescope inspecting would take about 0.5 work-hour for an estimated cost of \$43 per helicopter and \$473 for the U.S. fleet.

Repairing the M/R hub would take about 10 work-hours and parts would cost up to about \$3,000 for an estimated cost of up to \$3,850 and replacing the M/R hub would take about 8 work-hours and parts would cost about \$50,000 for an estimated cost of \$50,680.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus Helicopters: Docket No. FAA-2020-0652; Product Identifier 2019-SW-066-AD.

# (a) Applicability

This AD applies to Airbus Helicopters Model AS332C, AS332C1, AS332L, and AS332L1 helicopters, certificated in any category, with a main rotor (M/R) hub assembly (hub) part number (P/N) 332A31-0001-00, 332A31-0001-01, 332A31-0001-02, 332A31-0001-03, 332A31-0001-04, 332A31-0001-05, or 332A31-0001-06 installed.

## (b) Unsafe Condition

This AD defines the unsafe condition as incorrect assembly of the M/R hub. This condition could result in failure of the M/R hub components and subsequent loss of control of the helicopter.

## (c) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

## (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

## (e) Required Actions

- (1) Within 55 hours time-in-service, remove at least one M/R revolutions per minute ("NR") sensor and borescope inspect the phonic wheel lock washer (lock washer) for correct height of the lock washer (if the installation is correct, you can see the edge of the splines) through the hole of the removed "NR" sensor(s) as shown in Figure 1 to Airbus Helicopters Alert Service Bulletin No. AS332-62.00.76, Revision 0, dated May 27, 2019.
- (i) If the height of the lock washer is correct, before further flight, install the "NR" sensor(s).
- (ii) If the height of the lock washer is not correct, before further flight, install the "NR" sensor(s) and repair or replace the M/R hub in accordance with FAA-approved procedures.
- (2) As of the effective date of this AD, do not install M/R hub P/N 332A31-0001-00, 332A31-0001-01, 332A31-0001-02, 332A31-0001-03, 332A31-0001-04, 332A31-0001-05, or 332A31-0001-06 on any helicopter unless the actions of paragraph (e)(1) of this AD have been accomplished.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for

this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety

Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort

Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-

Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or

under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal

inspector, or lacking a principal inspector, the manager of the local flight standards

district office or certificate holding district office before operating any aircraft complying

with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Union Aviation Safety Agency

(previously European Aviation Safety Agency) (EASA) No. 2019-0172, dated July 18,

2019. You may view the EASA AD on the Internet at https://www.regulations.gov in the

AD Docket.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6230, Main Rotor

Mast/Swashplate.

Issued on July 10, 2020.

Lance T. Gant, Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

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